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ABSTRACT

In an effort to gather information on the status of special education programs in rural areas, visits were made to 33 school districts in 14 states representing 4 different administrative organizations (intermediate school districts, cooperatives, county systems, single districts) and 5 geographical regions. School populations ranged from 850 to 19,600. The percentage of handicapped students served ranged from 5.6% to 18.6%, paralleling national figures. Personnel problems were of major significance. Concerns focused on certification requirements, insensitivity of university training programs to rural needs, and lack of resources for systematic staff development. Programs for severely retarded students in rural schools were numerous but many functioned with problems in early intervention, age-appropriateness and least restrictive environment, curriculum and instruction, and leadership. Nearly one-half of the agencies had no early childhood programs. About one-third of the agencies had well-defined vocational education programs; frequency was highest in the single districts and decreased as the level of cooperation increased. State funding for programs was not consistent. The most frequently cited positive characteristics of state agencies were in the areas of technical assistance and staff development. In terms of availability of service options and scope of programs, the intermediate unit surfaced as an effective method for providing services. (NEC)

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RURAL SPECIAL EDUCATION: A CHALLENGE FOR THE SYSTEM

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TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
PROJECT DESIGN	4
RESULTS	7
Personnel Training	13
Certification	14
Training Programs	17
Staff Development	18
Low Incidence Handicaps	24
Hearing Impaired	24
Visually Impaired	30
Severely/Profoundly Retarded	33
Behaviorally Disordered	36
Preschool Programs	38
Vocational Education	39
Problems of Administrators	41
UNIQUE PROGRAMS	44
Least Restrictive Environment	44
Resource Rooms	47
Vocational Education	48
Moderately to Profoundly Retarded	50
Behaviorally Disordered	51
Hearing Impaired	52
Interagency Cooperation	54
Staff Development	54
Preschool	55
Administrative Organization	56
Computers	57
Cross-Age Tutoring	57

Table of Contents (cont.)

	PAGE
STATE LEVEL PROGRAMS	58
Funding	58
Mandated Age of Service	59
Services	59
Technical Assistance	59
Regional Efforts	59
Staff Development	60
Preschool Programs	60
Vocational Education	60
Regulation of Caseload	61
SUMMARY AND CONCLUSIONS	62
Summary	62
Conclusions	64
NOTES	71
REFERENCES	73

INTRODUCTION

The rural schools of the United States, like the communities in which they are located, were once viewed as the backbone of our society. With increasing urbanization, the philosophy of "bigger is better" emerged as a major criteria for evaluating the efficacy of educational systems. As a result, attention was focused upon the deficiencies of rural schools, almost as though there was a need to justify large organizations by denigrating the smaller. In the ensuing discussion, the attributes of rural schools were seldom mentioned.

With increasing consolidation, the percentage of students attending small schools decreased. This was accentuated by the out-migration from rural areas to the metropolitan centers. Attention to the problems of rural schools diminished. Reversal of the population shifts (Sher, 1978; American Association of School Administrators, 1982) has helped to focus more attention on rural areas. The growth rate for rural areas during the decade of the seventies was 15.4% as compared to 9.1% for the metropolitan areas. To further facilitate greater concern for rural schools there was increasing recognition that school consolidation could not solve all of the problems and that other innovations had to be considered.

It is difficult to find concensus regarding the definition of rural schools. All of the proposed definitions are subject to criticism for one or more reasons. Probably one of the major reasons for this difficulty is the diversity of rural schools. In recognition of this difficulty, several authors have proposed taxonomies for understanding rural schools. Nachtigal (in press) proposes three categories: rural poor, traditional middle America, and communities in transition.

The American Association of School Administrators (AASA) quotes Gjelten as proposing five distinct types with the following characteristics:

1. Stable - white, homogeneous, and primarily agricultural.
2. Depressed - marginal sources of income, underdeveloped economy, and out-migration.
3. High growth - new resources, increasing enrollment.
4. "Reborn" - scenic and/or recreational area or near new sources of energy.
5. Isolated - little contact with outside world due to distances and/or geographical factors such as deserts, mountains, islands. (AASA, 1982)

Other taxonomies have been developed as well. Probably the best expression to reflect the situation comes from an educational organization. "Rural schools are as different from each other as they are from the urban systems which so often serve as their contrast." (AASA, 1982)

In spite of the diversity, one must consider that these schools enroll approximately one-third of all elementary and secondary students in the United States. Yet, they account for the largest number of school districts. Out of 16,000 school districts in the United States, 12,000 enroll less than 2,500 students (AASA, 1982).

Those schools have an average per pupil expenditure which is 20% lower than schools in the urban areas. They spend nearly four times as much for transportation. Yet, federal funding is more difficult for these school districts to obtain (Sher, 1978; Helge, 1980) and the National Center for Educational Statistics does not compile data on school districts with enrollments of less than 2,500.

It is within this context that the United States Congress passed the Education of All Handicapped Children Act (P.L. 94-142) which imposed a number of requirements on all local education agencies. Among the students

enrolled in these rural schools were a substantial number of handicapped students. Estimates of the numbers range from 150,000 (U.S. Bureau of Census, 1976) to 1.5 million (Weatherman, 1982) or 1.8 million (Education of Handicapped Newsletter, June 1, 1979; Helge, 1980). The former figures are generally perceived as a failure to identify handicapped children in rural areas. There are, however, substantial numbers of handicapped students attending rural schools.

In attempting to serve these students, rural educators have frequently attempted to reproduce the sophisticated delivery systems developed by their urban counterparts. The results have not been particularly successful and some authors are now pleading for a different delivery system for rural areas (Helge, 1979; Weatherman, 1982). Heller (1975) points out that under the urban model, the rural educator had two options: take the child to the professional for service or take the service to the child. Both options entailed fiscal loss and/or waste of professional expertise.

Many of the problems of providing special education services in rural areas have been documented (Helge, 1981; Helge, 1983; Weatherman, 1982). At least one study indicates that rural schools are less likely to be in compliance with the federal laws than metropolitan districts (Weber and Rockoff, 1980). There appears to be consensus among the authors that problems of education in rural areas have unique aspects which have not been adequately addressed. The development of delivery systems for the education of handicapped children which are in compliance with state and federal laws present an even more formidable task.

PROJECT DESIGN

The purpose of the project was to obtain information on the development of special education programs in rural school districts of the United States. There were six major areas of concern:

1. The interrelationship between state departments, training programs, and the local education agencies in the development of personnel to meet the needs of rural schools.
2. The efforts of the local education agencies to maintain and increase the level of skill of the special education personnel.
3. The status of programs for low incidence handicapped children, specifically, severely retarded, hearing impaired, vision impaired and emotionally disturbed.
4. The status of early childhood and vocational education programs.
5. Problems encountered in the development of adequate services to handicapped students.
6. Identification of unique programs for handicapped students.

Due to resource limitations it was necessary to restrict the sampling of schools by identifying states that were contiguous to each other and that were located within reasonable travel distance. The result was that groups of states were selected in various parts of the country including the Northeast, Southeast, upper Midwest, Southwest, and Northwest. The one major area of the country which was not included in this project were the schools in the mid South. It was recognized that those schools may have some characteristics which are different than other parts of the United States, but as indicated previously this was not intended to be a random sample of school programs across the country but rather a project to determine the status of special education in schools that were selected because of the recognition they had obtained for their program.

Once the states had been identified the directors of special education in the state department of educations in the 15 states were contacted requesting nominations for school districts within their state which would be of interest in this project. A letter was written to those directors indicating that the project was to study the delivery of special education services in rural and sparsely populated areas throughout the United States and to request the recommendation of two or three programs in the state which were unique in their delivery of services. No attempt was made to define the term rural. It was indicated in this letter that a particular interest is being expressed in three aspects: 1) the impact of licensure or certification requirements and the training of teachers on the service delivery system, 2) the management of staff development programs, and 3) a program for low incidence handicapped students. All but one of the state directors responded. This was probably predictable because of a class action suit being litigated in that state at the time that the project was underway.

Once the nominations had been obtained letters were addressed to the directors of special education in the local education agency. A total of 35 educational units were contacted and 33 responded favorable for a 95% response. Arrangements were then negotiated for dates during which a visit would be appropriate. Along with the rather remarkable response rate, it is even more remarkable that for all districts, the recommended dates were acceptable to the administrators except in one instance when the date fell during the spring vacation which was easily rescheduled. This resulted in a total of 33 school districts which participated in the project distributed according to the information in Table 1.

TABLE 1

Geographical Distribution of
Participating Educational Agencies

	North east	South east	Upper Midwest	South west	North west	Total
Number of States	3	3	3	2	3	14
Number of Agencies	8	6	8	5	6	33

The maximum amount of time devoted to each site visit was two days. The actual amount of time in the local agency varied from one-half day to the full two days. The optimum arrangement was to spend one-half day with the administrator responsible for the special education services and the remainder of the time visiting the programs themselves. This provided an opportunity to see the programs in action, talk with teachers, administrators, and other personnel, and to spend some time in the local community. Variations occurred in the actual amount of time for several reasons:

1. In some cases, activities in the local schools were such that any extended time constituted an imposition on the local personnel.
2. All programs could be observed in less time than was scheduled.
3. Unpredictable circumstances required changes in travel plans, i.e., snowstorms, family emergencies, etc.

RESULTS

One of the first tasks was to obtain some information regarding the characteristics of the agency which was being visited. Discussions were directed to identify the primary source of income for the area served. Table 2 contains the results.

TABLE 2

Primary Sources of Income

SOURCE	NUMBER OF AGENCIES	PERCENTAGE
Agriculture	12	36%
Agriculture/Industry	8	24%
Industry	4	12%
Agriculture/Tourism	3	9%
Agriculture/Mining	2	6%
Fishing	1	3%
Fishing/Tourism	1	3%
Reservation	1	3%
Reservation/Tourism/Industry	1	3%
Total	33	100%

In several cases there was not one but several sources of income. For example, there were a number of agencies in which the primary sources of income were from agriculture and another industry. In most cases it was a single industry which provided that particular income. Examples of such industries in this category would be furniture making, logging, electronics, or railroading. In only one instance was there a truly diversified industrial base for generating income.

In addition, there were several instances where tourism was the major source of income during only part of the year but other cases when it was continual. There were two school districts that were located on or near Indian reservations which had peculiar problems when the source of income was questioned. One was strictly a reservation school and was almost entirely supported by state funding with some federal funds available. The other was located near a reservation by a huge dam which was used for power generation and which also attracted a large number of tourists during parts of the year.

As can be seen from Table 2, agriculture was one of the major sources of income in approximately two-thirds of the states. This data is, for the most part, consistent with other studies of rural special education (Helge, 1983).

The data in Table 3 provides information regarding the agencies themselves. In this table, agencies were grouped according to the administrative unit.

TABLE 3

Population Characteristics of Units*

	INTERMEDIATE SCHOOL DISTRICTS	COOPERATIVES	COUNTY SCHOOL SYSTEMS	SINGLE DISTRICTS
Number	5	11	9	7
Pupil Enrollment Range	6,000-19,600	1,025-4,500	1,200-7,800	850-4,500
Total Number of School Districts in Units	103	54	**	**
Average School District Enrollment	616.5	347.4	4945	2242
Range-Percentage of Handicapped	7.5-9.2	6.4-14.7	5.6-18.6	6.1-15.9
Mean-Percentage of Handicapped	8.5	11.1	10.7	9.5
Median-Percentage of Handicapped	9.0	11.1	9.2	8.7

* Does not include the one non-profit educational corporation
** Each unit consisted of a single district

Intermediate school districts were those units responsible for the monitoring and/or administration of special education services in two of the states. In both states intermediate school districts had certain characteristics. First they were mandated by the state and they were designed to serve relatively large population areas even though the population of the region being served was very sparse. Second, they were assigned certain responsibilities by the State Department of Education which involved the establishment of relationships with the local school districts whether or not those districts participated in the special education services available from the intermediate school district. In one of the states the intermediate school districts were able to levy taxes and in the other state they received funding from the state and also provided services which were purchased by the local school districts. The number of local school districts involved in the intermediate school district structure arranged from 5 to 57. It should be noted that the intermediate school district which served 57 school districts was located in a very sparsely populated area.

Cooperatives were defined as those units which voluntarily banded together to provide special education services to a number of school districts. These cooperatives were not mandated by the state nor did they receive any special type of funding from the state. The number of school districts served by these cooperatives in this project ranged from 3 to 21.

There were a number of states in which the county school system carries the primary responsibility for special education services. In some cases these are truly county school systems and in other cases they worked with the local districts but were primarily responsible for the delivery of services.

The data in Table 3 indicates that in intermediate school districts or cooperatives the average school district enrollment was much smaller than where there were county school systems or single districts. This is probably a reflection of the need for services on a cooperative level in some of these very small school districts.

When the percentage of handicapped children being served was calculated, it ranged from 5.6% to 18.6%. The two extremes occur in the same administrative category--the county school system. The range in the percentage of handicapped children being served is less variable in the intermediate school district category than it is in any of the other administrative units. The mean percentage of students being served is also much lower in this particular organization than in the others. It could be hypothesized that this is the result of more consistent identification and assessment services over a number of school districts, or it could also be a function of the isolation of some of the rural schools that are being served in those units. The mean percentages for the other three categories of units are somewhat distorted because of the very high incidence of handicapped students in one or two of the districts in each category and the small number of agencies in each category.

One educational unit has been left out of this analysis. In one of the states, one method of providing educational services to handicapped students is through the organization of private, non-profit educational corporations which then administer the service. The school superintendents and board members serve as the board of directors of these corporations and fees are assessed to the participating schools. One of the reasons for the organization of such a corporation is that they have greater flexibility than a local educational agency might have. Therefore, it is a unique sort of arrangement which does not fit any of the other classifications. Further, this particular unit was an area which was very difficult to consider as rural.

All of the agencies employed teachers for the mildly handicapped. In some cases these were categorically defined programs such as educable mentally handicapped or learning disabled. In other instances they were identified as non-categorical (cross-categorical) programs for students with academic and/or mild behavior problems.

In addition, some units employed personnel in other areas. Some had teachers in other categories of handicapping conditions and some employed ancillary personnel as well. Table 4 indicates the percentage of each of the administrative units that employed staff in these areas. This data must be interpretted cautiously since it relates only to the employment of staff in these areas. Some of the factors which distort the data relating to teaching staff will be discussed under that particular topic. However, this data indicated that 66% of the agencies in the study employed psychologists, yet all had psychological services available. Some schools contracted with mental health agencies, universities, and private psychologists to provide service. Very few agencies contracted for social work services. If such service was available, it was due to the fact that such a person was employed in the agency.

In other instances, services were available on a regional basis. However, when this occurred it was more likely to be in the direct service categories (teachers and teacher consultants) than for other services.

This data does seem to confirm other reports (Education of Handicapped, July 13, 1983) that two of the most underserved populations are the emotionally disturbed and hearing impaired. Minimal services also seem to be available to visually handicapped students as well.

If one assumes that cooperatives and county districts operate on a broader base than single districts, one questions why a greater proportion

TABLE 4

Percentages of Units Employing Personnel*

AGENCY	N	TEACHER EMOT DIST	TEACHER TRAIN MENT RET	TEACHER HEAR IMP	TEACHER VIS HAND	TEACHER PRESCHOOL	TEACHER VOC ED	TEACHER** CONSULTANT	PSYCHOLOGIST	SOCIAL WORK	SPEECH CLINICIAN
Intermediate School Districts	5	20%	40%	40%	40%	100%	60%	100%	100%	40%	100%
Cooperatives	11	18%	18%	9%	--	55%	--	--	36%	--	64%
County School Districts	9	11%	67%	--	--	22%	22%	22%	78%	--	100%
Single School Districts	7	29%	43%	29%	14%	14%	--	14%	43%	29%	100%
Totals	32	19%	44%	13%	9%	25%	15%	19%	66%	13%	84%

* Does not include private corporation.

** Staff to provide program assistance to special education teachers and/or regular education teachers.

of single districts offer services for emotionally disturbed, hearing impaired, visually handicapped, and social work. It very well could be that this is a function of the small numbers of programs in each category.

Also, within some of the intermediate school districts and cooperatives, some schools employed their own staff, i.e., teachers of emotionally disturbed, but this data was not readily available in most instances. It appeared that this was infrequent in the cooperatives, but relatively common in the intermediate school districts.

In addition to psychological services, other services were contracted by some of the units as well. Occupational therapy services were contracted by two intermediate school districts and one unit in each of the other categories. One intermediate school district and one single district employed an occupational therapist.

No agency employed a physical therapist , but two intermediate school districts, one cooperative, two counties, and one single district contracted for services.

Personnel Training

Of all the problems in the education of handicapped students in rural areas, those that surface most frequently are related to personnel. Recruitment and retention are problems for all rural school administrators. Rural teachers display a bimodal curve with respect to the length of services in rural schools. They are likely to have less than three years of services or more than ten (AASA, 1982).

These problems are magnified when special education personnel are the subjects. Studies from the National Rural Project consistently identify personnel problems as the major impediment to providing adequate services to handicapped students (Helge, 1979, 1980, 1983; Helge and Marrs, 1981).

In that personnel problems are associated with an interaction of state education agencies (certification/licensure*), institutions of higher education (training), and the local education agency, information was solicited from the local administrators relating to these problems.

Certification. The structure of certification across the fourteen states in this project exhibits little, if any, consistency. Out of the fourteen states, there are five in which certification is completely non-categorical, i.e., individuals completing a training program are granted a certificate in special education and can serve all categories of handicapped students at all levels of service from mild to severe.

An additional four states had non-categorical certificates for mildly handicapped and categorical certification for the more severely handicapped. In some instances, there were accompanying regulations that specify if certain types of handicapping conditions occur within a mildly handicapped program, consultation with an individual who holds the appropriate categorical certificate in the severely handicapped is required.

The additional five states have categorical certificates but the majority of them have some arrangements for providing cross-categorical services. In each instance the regulations provide for the manner in which this is accomplished. One state has rules which indicates that a youngster whose handicap is in one area may be served by a teacher who has a certificate in another area if an appropriately certified teacher is not available or the student could be more adequately served by a teacher certified in another category. The problem must be addressed at the IEP meeting. It is included in the IEP and it is approved by the parents. Another state has regulations that allow

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*Due to differences in terminology from state to state, the terms "license" and "certificate" are used synonymously.

mildly handicapped students in one category to be served by teachers certified in another category if the students are in the special education program for less than 50% of the time. Another state qualifies their categorical certificate by indicating that students can be served in cross-categorical programs, but the majority of students in a particular program must be students whose handicap is in the same category as the teacher's certificate. Another indicates that special education teachers with a categorical certificate can serve handicapped children in all categorical areas if the services are being delivered in the resource program.

Probably the most interesting aspect of this data is that it is not sufficient to survey the states with regard to whether they have a categorical or non-categorical license (as is most frequently done), but one must also consider the regulations which interface with the certificate structure. Probably the most important fact is that 13 out of the 14 states which were included in this project have provisions for cross-categorical programming and only one state does not have provisions in this regard.

The directors were questioned about their certificate requirements in the state and then they were asked what kinds of difficulties they had with the certificate requirements. The responses were tabulated and collapsed in those areas which are identified in Table 5. In interpreting this table one must remember that in all except 3 of the 33 units included, there was some provisions for programming for handicapped students on a cross-categorical basis, regardless of whether the state had categorical certificates or whether they had a generic certificate. This becomes important when one considers the high frequency of some of the responses, particularly when 16 of the 34 indicated that they had no problems with the certification requirements. It must further be noted that while they might not have had problems with the certification

TABLE 5

Concerns with Certification

CONCERNS	NUMBERS
1. Categorical certificates result in too narrowly trained teachers to function in cross-categorical programs.	6
2. Teachers certified non-categorically are not receiving broad enough training.	6
3. Categorical certificate limits flexibility in assignment.	3
4. Ancillary personnel are certified by an agency outside of education over which the schools have no control.	3
5. Regulations relating to service delivery change without accompanying change in certification requirements.	1
6. State department fails to enforce requirements.	1
7. Provisional certificates results in too much turnover.	1
8. Certification requirements fails to provide for the differentiated roles of teachers.	1
9. No problems with certificates.	16

they may have had problems with the implementation of these requirements by training programs. Secondly, the next two responses of high frequency had to do with the breadth of skills that the teachers exhibited as a result of the training programs. In those states where teachers with categorical certificates were allowed to teach handicapped youngsters in other areas, the directors seemed to feel that the categorical certificate was too narrow while the directors in the programs where the teachers were being trained non-categorically felt that they were not being trained to accept the broad responsibilities in such programs. It appears that regardless of the type of certification regulations that the state may have, the administrators in rural programs are asking for an individual who has a broader range of skills than most of the training programs have been producing.

It is also interesting to note that the 16 directors who had said that they had no problems with licensures all came from states in which there is either a generic certificate or there is a categorical certificate with provisions to serve children cross-categorically.

Training Programs. The directors were also asked what they considered to be the major problems with the teacher education programs which prepared students to function in their educational agency. First, it must be recognized that when they were questioned about problems with the certification requirements there were 22 concerns generated by the 33 administrators. However, 71 responses were generated from the same number of administrators when asked about the problems in training programs. Table 6 presents the categories of responses to this question. Again, the responses were tabulated and collapsed into fewer categories.

TABLE 6

Concerns with Training Programs

CONCERNS	NUMBERS
1. Teachers are not trained in a wide variety of skills.	21
2. Institutions are insensitive to rural needs.	11
3. Students need extended practicums.	9
4. Students lack skills in assessment or using assessment data.	9
5. Training programs are too distant.	7
6. Communication problems with training programs.	6
7. Limited options in training programs.	3
8. Specific areas of weakness.	5

The overwhelming responses to the training that the students receive are represented in the concern about the breadth of training. When one realizes that in rural areas a special education teacher is expected to address a wide range of problems of handicapped students, the responses to this item may become more understandable. If one assumes that communication problems and insensitivity to needs are probably very closely related, a very large number of administrators feel that training programs are not interested in needs of rural special education. Also, one might hypothesize that those who said that individuals need greater practicum experiences are also concerned about the development of a wide range of skills in those students. If this is so, then nearly 60% of these responses are concerned with the limited skills that teachers exhibit in relationship to the needs in rural programs.

Staff Development. In a study specific to staff development in rural schools, almost one-half of the respondents typified their staff development activities as inadequate (Helge, 1981). This study identified major components of P.L. 94-142 which needed to be addressed in such activities. The author points out that the literature on staff development suggests that in order for efforts to be successful, the process needs to focus on individual needs, yet be systematic.

A portion of the interviews and the on-site observations was used to determine the nature of staff development activities. In obtaining this information a number of different variables were addressed. They were as follows:

1. The methods of providing for staff development activities.
2. The method for financing staff development activities.
3. The content of the staff development.
4. Problems which were encountered.

Again since these data were collected through conversations with the local administrator responsible for special education, they were tabulated and again collapsed into the major categories. When the method of providing for staff development activities were tabulated, the results found in Table 7 emerged.

TABLE 7

Methods of Staff Development

METHOD	NO. OF RESPONSES
1. Use of courses from local university or college.	12
2. Use of consultation on individual students.	11
3. Sending staff to workshops and conferences.	9
4. Use of cooperative or intermediate district staff to provide inservice.	9
5. Workshops offered by state department of education.	8
6. No staff development activities.	6
7. Sending staff to visit other programs.	5
Total	59*

*Some agencies had several methods.

Although there is probably little significant differences in the five top rated methods, the primary method of providing for staff development was the use of courses from the university or college in the area. For the most part teachers participating in this type of inservice were required to pay their tuition although there were some noticeable exceptions to this generalization. In many areas there was a very concerted effort to encourage the local training program to deliver the courses within the service area of the agency. In some cases they would cooperate with neighboring schools in an attempt to recruit sufficient students for the courses. It was frequently reported that the university was encouraged to offer courses which had been identified as a high

priority by the teachers in the special education programs. However, it was also reported frequently that there was no assurance that the training programs would deliver a specific individualized package for them. They were more likely to deliver coursework which was related to the attainment of a certificate.

The second most frequent method was the use of consultation for the teachers on the basis of individual students. This one was reported as a major method of staff development by approximately one-third of the agencies included in the project. Frequently it appeared, however, that there were no local resources available to provide consultation when unique educational problems would surface in handicapped children. The most frequent source of this consultation was the psychologist employed by the local agency, although it must be noted that some of the agencies did have teacher consultants who worked with special education teachers in an attempt to develop skills.

Sending the staff to workshops and conferences and the use of cooperative or intermediate district personnel to provide inservice was the next most frequently mentioned. Those who reported that they sent their staff to workshops and conferences as a primary method frequently reported that the P.L. 94-142 monies were used for this purpose. When a cooperative or an intermediate district provided the inservice training it was most often a part of a very systematic approach to the problem of staff development on the part of that particular unit, and not necessarily tailored for the local agency.

Six of the units reported that they had no staff development activities at all. There were a significant number of agencies where the staff development activities, when they did occur, were not systematic and at times it was difficult to determine their exact nature.

When the source of funding for staff development was considered, the results shown in Table 8 were obtained. As this table indicates, the primary source of training monies was from state funds that were targeted for staff development purposes. Less than one-fourth of the units in this project reported that they used local funds for staff development activities. Only 9 reported using funds available through P.L. 94-142, although there are specific monies targeted for staff development in that source of funding.

TABLE 8

Source of Funding for Staff Development

SOURCE	NUMBER
1. State funds targeted on staff development.	10
2. P.L. 94-142 funds.	9
3. Local funds.	7
4. Federal grants.	3
Total	29*

*Some reported several sources.

Identifying the content of staff development programs was difficult. Only a few of the programs had systematic assessment procedures which resulted in the establishment of priority needs for the staff. Most frequently the content of the staff development activities was developed as the needs were perceived by district administrators or, in the cases of attendance at workshops or university courses, as perceived by the needs of individual teachers. In some cases the staff development activities were targeted on the school population in general and there was very little specific to the special education personnel. For example, the use of computers in education is a high priority item in a large number of school districts around the country if the units in this

project were any kind of a sample. Special education people were expected to participate as well as all other school personnel.

The problems of funding emerged as the one major area of difficulty in the staff development process. Nearly one-half of the districts reported that as being a major difficulty.

A second major area was related to the diverse population which would be serving handicapped students in a rural situation. The personnel who would be targeted included everything from aides, to psychologists, to teachers, to other ancillary personnel. Finding some common areas of interest apparently proved difficult. The results of this part of the project are found in Table 9.

TABLE 9

Problems in Delivery of Staff Development

PROBLEM AREA	NO. OF RESPONSES
1. Obtaining funding.	14
2. Difficulty in targetting with a diverse population.	10
3. Low priority by administration.	10
4. Obtaining released time.	7
5. Motivating teachers.	7
6. Distances.	5
7. Others.	3
Total	58*

*Many reported more than one problem.

The third problem area was identified as low priority by the administration. This was quite noticeable during the site visits. In those agencies where the administration had given staff development a high priority, there typically was a systematic method of providing the inservice training. The funding was

specifically identified within the budget and several alternative methods of delivering the training would be in operation.

The two next frequent obstacles were obtaining released time for the teachers and motivating the teachers. It should be indicated that the manner in which these were reported and the fact that in no instance were both reported by the same special education administrator, leads one to conclude that these are very closely related problems. Those who reported that obtaining release time for the inservice was difficult, perceived that as the only method of being able to ensure that the appropriate staff was involved in the training activities. Those who reported that motivating teachers was a major difficulty were considering some other possibilities as well. For example, it was frequently reported that college credit was a way of motivating teachers to participate in staff development activities outside of the school day. However, motivation is a major problem in some areas. For example, in one case the special education administrator reported that a nationally recognized leader had been obtained for inservice session on a Saturday morning. Invitations were sent to all of the schools in his particular agency and only one response was obtained.

The intermediate school districts tended to have the most systematic staff development programs. Many of these had a formalized needs assessment, had multiple methods of delivery, had evaluation systems in place, and employed appropriate staff to provide the inservice.

However, it should not be assumed that this phenomena is limited to the intermediate service districts. There were examples of county school systems, single districts, and cooperatives that had very systematic and unique programs of staff development. In these instances there appeared to be a major commitment on the part of the local administration and governing boards to the concept of staff development.

There were some very unique kinds of staff development activities, some of which will be reported in more detail at the end of this report. One university has developed video tapes of an instructor in class which were mailed out to the rural areas and the WATS line was available to the students so that as they watched the tape, they could ask the instructor questions. Several of the districts would pay the tuition for their faculty to attend universities when the only training programs were a significant distance from the local programs.

In proposing several models for rural schools to consider in designing staff development programs, Helge indicates that the literature generally suggests "a need to find alternatives which are not ideal but which hopefully will suffice" (1981b, p. 15). Observations in these schools would suggest that the search for alternatives has not been particularly intense.

Low Incidence Handicaps

The problem of serving handicapped students who appear infrequently in a school population, but who present major problems when they are identified, has long been a problem for rural schools. A portion of the activities in this project was devoted to obtaining information on the status of programs for students who present such problems. Specifically, information was obtained on programs designed to serve the hearing impaired, behaviorally disordered (or emotionally disturbed), visually impaired, and the severely retarded.

Hearing Impaired. Several methods were used to analyze data obtained on programming for the hearing impaired students. First, the number of agencies with no identified hearing impaired students was obtained. The reliability of these data is probably somewhat suspect since it was obtained from the administrators of the programs and in several instances it was reported that there were no identified students with hearing problems, yet students

with hearing aids were observed in programs for mentally retarded or learning disabled. In some cases, hearing impaired students also appeared on the child count, but were not reported by the administrators.

Second, when the topic of services for hearing handicapped students was discussed, it became apparent that there were agencies with identified students, but no services available. In such cases, the students may have been enrolled in a state school or were in attendance at another school district. Table 10 displays the information on these programs, and it is grouped according to the administrative arrangement.

TABLE 10

Agencies Without Identified Students or Services for Hearing Impaired

ORGANIZATION	AGENCIES WITH NO IDENTIFIED STUDENTS		AGENCIES WITH NO SERVICE	
	N	%	N	%
Intermediate School Districts (N=5)	0	-	1	20%
Cooperatives (N=12)	2	17%	7	58%
County District (N=9)	2	22%	5	56%
Single Districts (N=7)	3	43%	6	85%
Total	7	21%	19	57%

These data provide a cogent argument for greater interagency cooperation, both in terms of identification procedures and the development of service systems. The obvious differences in the levels of service suggest that larger units (ISD) are more capable of developing programs. Such programs were virtually absent in the single districts. Some of the cooperatives and county districts were participating in regional programs that consumed a minimum of local resources.

Another approach to measure the level of service is to compare the percentage of identified hearing impaired students with the estimated prevalence rates. Caution has to be exercised in the application of prevalence estimates to small populations such as those which were the subject of this project. In individual situations, application of such estimates can create erroneous projections. On the other hand, a few handicapped children in a small population can result in percentages that exceed the estimates by a considerable degree. For the purposes of the project, it was assumed that such deviations would tend to offset each other over the number of agencies under consideration.

Generally, the estimated prevalence of hearing impaired students in a school population ranges from .3% to .7%. Table 11 provides information on the percentages of hearing impaired students identified in each of the administrative organizations.

TABLE 11

Percentages of Agencies Reporting
Hearing Impaired Students by Organizations

ORGANIZATION	PERCENTAGE OF IDENTIFIED HEARING IMPAIRED							
	<.1		.1 - .29		.3 - .7		>.7	
	N	%	N	%	N	%	N	%
Intermediate School Districts (N=5)	2	40%	3	60%	-	-	-	-
Cooperatives (N=12)	6	50%	6	50%	-	-	-	-
County Districts (N=9)	5	56%	3	33%	-	-	1	11%
Single Districts (N=7)	3	43%	3	43%	1	14%	-	-
Total	16	48%	15	45%	1	3%	1	3%

Several observations can be made from this table. First, nearly half of all the agencies in this project had identified less than .1% of their enrollment as hearing impaired. It was not unusual to find that the only identified students were those attending a state residential school, and had been placed there during the preschool years by the parents and/or a social service agency. It was also not unusual to find that the agency had little, if any, contact with the student or the residential school in spite of the legal responsibility to ensure an appropriate program.

Observations would indicate that most of the identified students were those with severe losses. This tended to be confirmed by the relatively few agencies that had developed systematic, effective screening procedures.

Since there was not a direct relationship between enrollment and the administrative organizations (see Table 3), the same procedure was applied to data on the enrollment within the agency. Table 12 provides this information. The size of the enrollment appears to be unrelated to the percentage of identified students. Problems of identification of hearing impaired students seems to be general in rural areas.

TABLE 12

Percentages of Agencies Reporting
Hearing Impaired Students by Enrollment

ENROLLMENT	PERCENTAGE OF IDENTIFIED HEARING IMPAIRED							
	<.1		.1 - .29		.3 - .7		>.7	
	N	%	N	%	N	%	N	%
10,000 or more (N=6)	3	50%	3	50%				
3,500 - 9,999 (N=8)	4	50%	4	50%				
1,500 - 3,499 (N=9)	3	33%	4	44%	1	11%	1	11%
Less than 1,500 (N=10)	6	60%	4	40%				
Total	16	48%	15	45%	1	3%	1	3%

As a result of the analysis of the data and the observations of programs, several conclusions can be made regarding programs for the hearing impaired. It needs to be emphasized again that these were not randomly selected programs but probably represent some of the better programming in rural areas of the United States. At any rate, the following observations appear to be appropriate:

1. By and large, there is very little activity in the area of identification of hearing impaired students. Given the mandate to identify handicapped children, one might expect greater efforts to develop consistent and reliable methods in the schools. Severely impaired students tend to surface without such identification procedures in place and, therefore, most of the local services are directed toward this group of youngsters.
2. There do not seem to be many options available for serving hearing impaired students in these rural areas. Typically the two choices of placements for such a child is in the regular classroom (with or without support services) or placement out of the district. Only a few of the agencies visited had any range of options available. Frequently these were agencies that participated in state regional programs or educational service districts. Because of idiosyncratic local conditions, a few county or single districts had developed such options. This is not to be interpretted as a totally negative phenomena, as there were some unique programs serving hearing impaired students even with limited options.
3. Services appear to be more effective in terms of availability of options and the development of identification procedures when there are regional organizations. Whether an urban developed

model is being implemented or whether innovative strategies are being developed for rural areas, such regional arrangements appear to facilitate these efforts.

4. Educational personnel who have been trained to work with hearing impaired students are an endangered species in rural areas. While some agencies had regional or local consultants available to them, this was frequently on a very structured basis and services were sometimes minimal. This consultation was often from professionals with expertise in hearing impairments, but with little knowledge of educational programming. Some of the professionals employed as private consultants not only lacked training in educational programming, but also exhibited programmatic philosophies which were not consistent with the schools in which they were serving.
5. In a typical rural program, a speech clinician is likely to be responsible for language development programs and alternative methods of communication. Resource teachers and regular education teachers shoulder the responsibility for academic progress. Frequently none of these individuals were trained for their specific roles, and it was rare to find someone aware of the social development aspects of hearing problems. Comprehensive services are rare.
6. One frequently has the feeling that students with hearing impairments have a low priority in many of the agencies. This could be due to the fact that it is a low incidence condition, difficult to identify at times, and severe problems are resolved prior to the child attaining school age.

Visually Impaired Programs. Essentially the same methods of analysis were used for programs for the visually handicapped as were used for the hearing impaired programs. They were subject to the same limitations and assumptions, and, due to the fact that the prevalence estimates are even lower, such assumptions may be even more tenuous.

The data in Table 13 provides information on the local agencies where there were no identified visually impaired students and those where no services were available. When compared to the data on hearing impaired, the same general pattern emerges, except there are more agencies without identified students. Yet, the distribution of agencies without service is remarkably similar. Again, the need for cooperation seems evident.

TABLE 13

Agencies Without Identified Students or Services for Visually Impaired

ORGANIZATION	AGENCIES WITH NO IDENTIFIED STUDENTS		AGENCIES WITH NO SERVICE	
	N	%	N	%
Intermediate School Districts (N=5)	-	-	1	20%
Cooperatives (N=12)	6	50%	7	58%
County Districts (N=9)	5	56%	5	56%
Single Districts (N=7)	3	43%	6	86%
Total	14	42%	19	58%

In some ways, the data are the cause for greater optimism than the analysis of programs for the hearing impaired in that nearly one-third of the agencies report identified visually impaired within or above the estimated prevalence range of .05% to .15%. This information is found in Table 14. Also, there is an increasing percentage of identified students as the cooperational level of the agency increases.

TABLE 14

Percentage of Agencies Reporting Visually Impaired Students by Organization

ORGANIZATION	PERCENTAGE OF IDENTIFIED VISUALLY IMPAIRED					
	<.05		.05 - .15		>.15	
	N	%	N	%	N	%
Intermediate School Districts (N=5)	2	40%	3	50%	-	-
Cooperatives (N=12)	9	75%	3	25%	-	-
County Districts (N=9)	6	71%	2	22%	1	11%
Single Districts (N=7)	6	86%	1	14%	-	-
Total	23	70%	9	27%	1	3%

The relationship to enrollment is less clear. As with the hearing impaired, it is difficult to argue that, as the size of the unit increases, so does the effectiveness of their identification procedures. The data on this relationship can be found in Table 15.

TABLE 15

Percentage of Agencies Reporting Visually Impaired Students by Enrollment

ORGANIZATION	PERCENTAGE OF IDENTIFIED VISUALLY IMPAIRED					
	<.05		.05 - .15		>.15	
	N	%	N	%	N	%
10,000 or more (N=6)	3	50%	3	50%	-	-
3,500 - 9,999 (N=8)	8	100%	-	-	-	-
1,500 - 3,499 (N=9)	5	56%	3	33%	1	11%
Less than 1,500 (N=10)	7	70%	3	30%	-	-
Total	23	70%	9	27%	1	3%

The data and observation of programs would lead to several concerns:

1. As with hearing impaired, identification of students seems to be a problem in this area as well. It was not uncommon to find agencies with no screening procedures. Frequently, there were no plans if a teacher should refer a student as a possible visually impaired child. Services were directed primarily to those who were easily identified, i.e., the severely impaired.
2. This problem manifests itself in a rather unusual manner. Students with severe vision problems were frequently placed in state residential schools during their preschool years and the public schools had little contact. Yet there were a number of students with somewhat less severe handicaps who were being educated in regular school programs with the help of large print books, visual aids, etc.
3. Identification processes appeared to be somewhat more effective than in hearing when one compares the member of students to the expected prevalence. This may be a factor of a lower prevalence rate and the reduced possibility of confusing the symptoms with another type of handicapping condition.
4. Programmatic services are a major problem. Seventy percent of the agencies had no services available to them. Residential schools were the primary method for many agencies simply due to the fact that no other options were available.
5. As with the hearing impaired, this particular group of children do not seem to rate a high priority and probably for the same reason.

Severely/Profoundly Retarded. In attempting to obtain information on programs for the more severely retarded students, several problems were encountered. First, there was a major problem with terminology and classification. In some states, one broad classification existed which included all retarded students except the mildly retarded. Such states used a label such as trainable mentally retarded. In some cases this was a functional label which also included other populations as well, such as multiply-handicapped, autistic, etc. In other instances, the states used categories which were more specific, and, in some cases, a rather complex classification system within this group had been developed. For the purposes of this project, all except the mildly retarded were included.

Second, this is an area where there are frequently a number of agencies involved. In some instances, other agencies operate programs that the schools use. In other cases, legal requirements of an agency have an impact on the programs in the schools. The question of the responsible agency is still an issue in some states.

Various aspects of programming were the focus of this project. In recent years, there has probably been no other group of handicapped children whose education has been more influenced by legislation than the severely retarded. As the schools were confronted with a population of students that were previously the responsibility of other segments of society, and who presented educational challenges unlike any other group of students, new procedures and material were developed to meet this need. These new directions have been documented by a number of authors (Sailor and Haring, 1977; Lent, 1975). Some of the principles of the emerging programs were used to assess the status of programs in rural areas. While obviously very few programs would have all these components, it did provide a basis for observing programs

in the schools. Included were:

1. Is there the opportunity for early intervention?
2. Is the program located where interaction with non-handicapped children is possible? Is it age appropriate?
3. Are the assessment devices in use which will generate objectives and measure student progress in the curriculum?
4. Do the teaching procedures include individualized, behaviorally oriented management, and/or the use of educational technology?
5. Is there a vocational education component to the program?
6. Is leadership available to maintain a program consistent with available knowledge?

When preschool services for severely retarded students were surveyed, a number of problems were encountered. These will be more specifically addressed in the preschool section. For the purposes of this section, it was attempted to determine the availability of services. A number of different models became evident. Two of the intermediate school districts, one of the cooperatives, and one of the county systems had non-categorical programs available which could program for the more severely retarded. One intermediate school district had categorical programs for severely retarded that were capable of providing services to preschool-age children. Several other units used facilities operated by other agencies to provide services. Such programs included day activity centers, Head Start, and programs operated by the parent organizations.

Fifty-five percent of the agencies had programs located in facilities where contact with non-handicapped students was possible. However, such a placement did not assure that such interaction would occur. A number of those programs were as effectively isolated as though they were in a segregated facility. Also, when one considers the 18 agencies that had programs in the regular school buildings, ten of them would hardly qualify as being age appropriate. In addition, there were those agencies that had both segregated and integrated facilities.

The breakdown of programs by administrative organization is revealing. Seventy-one percent of the single districts, 89% of the county districts, 25% of the cooperatives, and 40% of the intermediate school districts had programs in regular school buildings. In the single districts and county systems, it was not unusual to find the moderately (and at times the severely) retarded student spending a considerable amount of time with the non-handicapped. This occurred almost out of necessity, since there were often not many other options available. As the cooperative efforts increased, so did the development of segregated facilities. Out-of-district placement was most common in the cooperative units with 42% using this option. In county systems and single districts, it was 33% and 30% respectively. Four agencies had no services and reported no students in this category.

Curriculum-based assessment instruments were not common. Eleven units (33%) were using such measurement, and in some cases, the instrument was being administered, but not used for program planning. In the words of one teacher--"Why do we have to use this when the results don't help me teach?" In some states, such measurement was mandated and this would account for 4 of the 11 agencies which used these procedures.

Observations in programs and discussions with administrators and teachers were used to determine the instructional management style in the programs. Essentially, there were three components:

1. Were the instructional techniques individualized and based upon appropriate skills for the population?
2. Were behavioral principles applied in the learning situation?
3. Was the use of any educational technology evident?

Four programs qualified on the first two criteria. The other programs tended to be very traditional. They were group oriented and often stressed the basic skills even for the older students.

Twenty-four percent of the programs had a vocational component. It was not uncommon for such programs to be the result of joint efforts of the school and another agency, e.g., local sheltered workshop. Most frequently, however, it was strictly a school program and in some cases involved vocational instructors.

Because developments in this field have been so rapid, an attempt was made to identify programmatic leadership. This was conceptualized to be someone who was trained and current in the education of the severely retarded and who could assist the teachers in developing more adequate programs. Such leadership was identified in only two instances. In many cases, programmatic leadership in this area was non-existent at the state level.

Behaviorally Disordered. Students with behavioral disorders have probably been one of the most difficult groups of handicapped children to accommodate. Apparently there are a variety of influences at work which create such difficulty. Problems with labelling, lack of trained personnel, questions regarding an appropriate model, and problems of definition have probably all been influential in impeding program development. If one uses estimated prevalence

rates as a criteria, this is one of the most underserved groups of students nationwide.

The observations in the project would support that conclusion. If one accepts 2% as a reasonable estimate, only one cooperative even approached this level (1.96% of a total student population of just over 1,000). The next highest percentage was .57% in an agency with over 2,500 enrollment.

Ten units had no identified students with behavioral disorders. Five of those were county systems and four were single districts. An additional four units (three cooperatives and one single district) had one identified student.

There was considerable variability in the type of programs which were available to students with behavior problems. Three (9%) units had facilities that were segregated from the rest of the school programs. Typically, these programs were in the eastern part of the country and were found where larger populations were being served. Nearly one-fourth (8) of the agencies had self-contained classrooms for such students. Two units (6%) had programs which were designed to support students with behavior problems in the regular classroom by using trained personnel. Three units (9%) had programs which included both the option for self-contained classroom placement and support services for regular classroom placement. The largest number of agencies (12-37%) depended upon a resource teacher who served other mildly handicapped students to provide support services to the regular school program. Only occasionally did these teachers have specific training in the management and education of students with behavior problems. Five agencies (15%) placed the students out of the district. Three units which had no students with behavior problems also had no plans for accommodating such children.

In these rural areas, a very limited number of behaviorally disordered students have been identified. Programs that have been developed are highly variable. This is probably a reflection of the lack of consistency in the field, generally.

Preschool Programs

Early intervention is a part of the federal legislation. However, the mandate is modified by a number of exemptions. Realistically, it becomes a matter of state policy and local interpretation. Considerable variation exists with regard to state laws. In one instance, the state mandates services to handicapped students starting at birth. In another state, the law forbids the expenditure of state or local funds on early childhood programs for children under five years of age. Programs in this state, where they do exist, are financed by federal money.

Nearly half of the agencies in this project (15) did not have any services available to handicapped children of preschool age. Another six units did not operate programs, but had cooperative arrangements with other community agencies to provide service. These arrangements varied from informal understandings to complex arrangements which involved a variety of resources, including finances, staff facilities, transportation, and other services.

Of the twelve remaining agencies, seven operated programs which had both center-based and home-based components. The typical pattern in such programs was to provide support services in the home for the youngest children, usually from ages 0 to $2\frac{1}{2}$ or 3. After this age, there was a distinct shift to center-based services.

Center-based programs were operated in four of the units. Although some of these programs had outreach services for parents, the predominate

thrust was to provide services within the school facility. Most of these were only for children between 3 and 5 years of age. There was only one totally home-based program.

There appeared to be a direct relationship between the organizational structure and the availability of early childhood programs. Eighty percent of the intermediate school districts, 33% of the cooperatives and county districts, and 14% of the single districts offered programs.

In spite of the incentives in the legislation and the great amount of support among the professionals, early intervention programs appear to be slow in developing. In most instances, state legislation cannot be viewed as facilitating. Also, in many of the conservative rural areas, such intervention on the part of the school is not supported by the public. Further, in times of financial crises, it is difficult to expand programs to previously unserved population.

Vocational Education

Recently, the problem of transition from school to work has been receiving increased attention. Congressional debates have reflected concern about the problems of employability of the handicapped after completion of special education programs specifically designed to meet their needs. Special Education Programs in the Department of Education has recognized this as a high priority area. In this project, information was obtained regarding the status of vocational education programs for the handicapped.

There were a number of ways to address this problem. One was to establish vocational education programs in facilities only serving the handicapped. There were no instances of this in the project sites, with the possible exception of some programs for the severely handicapped. Programs at the

secondary level often involved workshop activities either in the school or in cooperation with other community agencies.

The most common model for providing vocational education services was the integration of handicapped students into existing vocational education programs at the secondary level. The usual pattern for these programs was to provide vocational programs for one-half day during the junior and senior years. Ten of the agencies followed this type of model and handicapped students were found in the same programs as non-handicapped. Nine of those ten programs provided student support in the form of special education personnel who assisted the vocational instructor in instructional and curricular modification and provided assistance to the student when needed.

Four agencies had workstudy programs, most of them in single district units. A special education teacher at the secondary level was assigned to coordinate such programs. Responsibilities included finding training sites in local businesses, ensuring the development of the necessary skills, and monitoring student progress. The amount of time that students participated in work activities varied from one-hour to a half-day.

Three agencies reported that their vocational programs consisted of modifying the courses in industrial education and home economics to develop skills necessary for employment in handicapped students. Three other agencies transported handicapped students to programs out of the district, and eleven (30%) reported no vocational possibilities at all for handicapped students.

When the vocational programs were compared with the administrative organization, an interesting relationship developed. Sixty percent of the intermediate school districts, 50% of the cooperatives, 77% of the county systems, and 100% of the single districts had some type of vocational program in place.

Again, one is confronted with extreme variability on the availability and nature of vocational education for the handicapped. The fact that 30% of the schools had no method for providing this service is certainly a concern. The fact that more services are in place in single districts and in county systems may be a reflection of the accommodating nature of vocational instructors in smaller systems (Wolfe, 1983).

Problems of Administrators

One of the final questions raised in the interview with the administrator with responsibility for the special education program was to ask them to identify any major problems which interferred with the development of quality programs for handicapped students. The responses ranged from none (one director) to as many as seven or eight. These responses were listed and then collapsed into a number of different categories. The results are found in Table 16.

TABLE 16

Major Problems as Viewed
by Special Education Directors

AREA OF CONCERN	NO. REPORTING
State Department of Education	14
Transportation of Students	12
Financing Special Education	12
Population Density	12
Personnel	11
Administrative Problems	10
Acceptance of Regular Education	7
Program Development	6
Miscellaneous	5

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Program Development	6
Miscellaneous	5

The most frequently cited problem was difficulty with the state department of education. Basically, the responses seemed to indicate a feeling that the state leadership was not sensitive to rural needs. Specifically, the remarks in this area referred to lack of leadership, lack of technical assistance, inappropriate regulations such as staff-student ratios, eligibility criteria, lack of support for regional programming, and an inability to participate in long range planning activities because of changing regulations and policy.

Three concerns surfaced with the same frequency and two were closely related. Those two related to distances and population density. Transportation of students was perceived as a problem from a variety of perspectives. The cost of transporting small numbers of students for long distances to obtain services was one. More frequently the efficiency of the transportation system was questioned, particularly in view of the time that was required of students. Another frequently mentioned concern was the coordination of services when more than one system was involved.

On the other hand, population density was seen as a problem when staff had to travel. The concern was the amount of professional time that was not directed toward student assistance because of travel time. It was also reflected in problems of programming for low incidence students, communications, and public awareness.

At the time of this project, the economy of the United States was suffering badly. Because of shifts in the tax base and other activities at the federal level, many states were having severe difficulties with their budgets. This was reflected, of course, in the local budget. This could account for the high frequency of problems reported with the financing of special education. On the other hand, it is possible that the same results would have been obtained under better fiscal conditions.

One problem that has almost inevitably been cited in studies on rural special education is personnel. It was reflected in this project as the inability to recruit and retain staff, the quality of the staff that was available, and the lack of resources to provide training.

Administrative problems centered around the role of the director of special education. There appeared to be a conflict between the director's perception of the role and the tasks that he found he had to do. Paperwork, of course, topped the list. Basically, there did not seem to be sufficient time for the directors to do all of the required tasks and also do those things which would improve educational programs.

This was reflected also in one of the other categories--program development. The difference was that in this instance, a specific problem area was identified. The major areas of concern were secondary programs, more efficient methods of providing for related services, and interagency cooperation.

Seven directors reported major problems with the acceptance of special education programs, services, and students by regular educators. In some cases the comments were directed toward administrators and in some cases toward secondary teachers. Elementary teachers were never identified as a problem area.

The miscellaneous category contains a number of characteristics that were indigenous to a specific area--language problems, cultural differences, student characteristics, and poverty.

UNIQUE PROGRAMS

In spite of the many difficulties which confront rural special education administrators, frequently different approaches to the solution of problems emerge. This section of the report is devoted to brief descriptions of some of the more creative solutions which were observed during the project. Some procedures occurred more than once, but for the most part, these descriptions represent approaches in one agency or combination of agencies.

No attempt was made to evaluate or make any judgments about the efficacy or desirability of these programs. Indeed, some of these descriptions may pertain to programs which would not be feasible in other states because of regulations or other factors. They are simply presented as solutions which have been developed in response to problems.

Least Restrictive Environment

1. In order to maintain mildly handicapped students in the regular school program, one school serving a substantial native-American population provides two different sources of support. First, in the grades of kindergarten through third grade, each classroom has two native-American aides who help in the assimilation of this group into the school program by assisting in the transition to school and helping with the communication problems which frequently arise due to language and/or cultural differences. Secondly, a building team consisting of a school psychologist, special education teacher, other special education support personnel, and regular education teachers have provided assistance in helping to accommodate the student in the regular school program prior to referral for special education services.

2. In a very sparsely populated area, there are twelve rural schools with enrollments ranging from 3 to 28 pupils. The number of teachers range from 1 to 4. Thus, the student-teacher ratio is quite low. Itinerant special education personnel provide the assessment and, with the teacher and parents, assist in the development of the individual educational program. The teachers are then provided consultation (and training, if necessary) to implement the program. Student progress is monitored weekly by special education staff and programmatic changes made as appropriate. In cases of some students with more difficult handicaps, an aide may be trained to provide more intense intervention.
3. An intermediate school district serving over 50 individual schools ranging in enrollment from 2 to over 1,000 pupils has a wide range of support personnel available--psychologist, occupational and physical therapists, social workers and other support personnel. They also employ two consultants for regular classroom teachers whose job is to assist these teachers in making successful adaptations for handicapped students. Because of the wide range of specialists available, they are able to coordinate the impact of services on the programs.
4. Another variation of the building team occurred in an agency which became concerned about the number of referrals for special education services. The building teams were originally developed as a means of screening referrals for service. However, it was recognized that these teams (consisting of the building administator, regular education teachers, and special education teachers) were leaving the teachers with the problem when they did not process

a referral. Therefore, they expanded into a team that provides technical assistance to the regular classroom teacher in order to maintain the student in this program.

5. A school district with an enrollment of slightly over 1,000 was confronted with problems of programming for one student with a moderate hearing loss and two retarded students where the most obvious option was placement in a residential facility. However, a commitment to help keep such students in the community led to the development of highly individualized programs for these students. First, assistance was obtained in the assessment process and the development of the individualized educational program. Assistance in the development of this program was provided by the resource teacher, the regular classroom teacher, an aide, the speech clinician, the administrator, and the outside consultant. The aides are with the students during the time they are in the regular classroom. The students receive support services from the speech clinician and the resource teacher and the program is monitored periodically by the consultants.
6. An industrial arts program has been developed in the junior high school program in one school which helps in accommodating mildly handicapped students. The program is based on a learning center concept and the students elect the areas in which they wish to work. Three instructors provide opportunities in 16 different offerings each semester which range from woodworking to crafts. Instructors provide guidance through the learning center activities rather than lecture. Instruction consists of both independent work and direct instruction from the faculty. Students proceed at their

own rate through the curricula. Instructors report that they frequently cannot identify students receiving special education.

7. A small coastal community with an enrollment of less than 1,000 is highly dependent on tourists on a seasonal basis. During the school year, the district serves a population of relatively low socio-economic level families who have children who tend to have language related problems. It was hypothesized that this could be correlated with the high incidence of reading problems in the school population. In order to address this problem, students in the third, fourth, and fifth grades who are having major difficulties are placed with special teachers for basic skills instruction. These teachers have only 15-17 students in their caseload. Preliminary evaluation results indicate an increase in reading level of sixth graders. This program serves many students who would otherwise be referred for special education services.

Resource Rooms

1. A resource room has been structured by one school district to provide for students with a range of problems. The room is staffed by a teacher and an aide. Some students receive only a minimal amount of assistance and are in the program for less than one hour each day. Other students are in the resource room on nearly a full-time basis and are in the regular school program for a minimal amount of time. This allows the school districts to provide greater intensity of service to the relatively few students who need it while providing minimal services designed to maintain less handicapped students in the regular education program.

2. A secondary resource program serves two different groups of students. The first group are those who have been identified as eligible for special education services and an individualized educational program is in place. Services are delivered to this population of students on a priority basis and in conformity with the plan. The second group of students are those who request assistance on a voluntary basis. They are accepted on a space available basis and at times students in advanced courses who are having temporary difficulty will be found in this resource room.

Vocational Education Programs

1. A high school program for vocational training serves learning disabled and educable mentally retarded students at the high school level. One-half of the day is spent in academic subjects and the other half in a vocational area with support from special education staff. The vocational opportunities are determined by the availability of jobs in the local community. A wide range of vocational choices become available to the students based upon this method of selection. Students obtain credit toward graduation in language arts and in mathematics for their participation in this program.
2. About 50 handicapped students are participating at any particular time in a secondary vocational education center operated by an intermediate school district which enrolls about 650 students. Approximately one-half of the handicapped students are bussed from their local school districts in the morning for 2½ hours of vocational education and the other half are in the center in the afternoon. During the time they are not in attendance at the center, they are taking courses in their home high school. The

vocational education activities are credited toward graduation. Special education support personnel are assigned full-time to the vocational center to assist in placement in vocational programs, and to provide support for the vocational instructors and for the students. At the time of the visit, all vocational education programs had at least one handicapped student enrolled, except for the steno-secretary program.

3. A high school in a district with an enrollment of approximately 2,500 operates a vocational education program as a part of the high school curriculum. A program designed to integrate handicapped students has been developed in this facility. Academic components of the vocational programs may be taught by regular vocational instructors, by special education personnel, or by both. The classes of 8-12 students include both handicapped and non-handicapped. Curriculum modifications are implemented to assist both special education students as well as other students who may be having difficulty. Modifications may occur in curriculum, instructional methods, or materials. Handicapped students have been successfully integrated in all vocational programs except data processing and business.
4. A very small high school has limited access to a vocational center in another district. In order to better serve the secondary age handicapped student, a faculty member in the area of career and vocational education was employed. Courses in career education, career exploration, and pre-vocational skills are taught during the freshman and sophomore years. These activities constitute one-half of the teaching assignment. The other half is spent as

coordinator of a workstudy program. At the beginning of the junior year, students identify their vocational interests and the coordinator finds positions for them in the community in which they work for one-half day. Credit toward graduation, but no pay, is provided for this experience. It includes, but is not restricted to special education students. At the present time, 6 of the 19 enrolled students were receiving special education services.

Moderately to Profoundly Retarded

1. One of the states included in this project mandates services to handicapped students from ages 0 to 25. The post-secondary group for which services are most frequently available are the mentally retarded students in the moderate to profound range. One intermediate school district was concerned about age appropriateness for moderately retarded students of post-secondary age who still needed services. On the local university campus was a vocational education center with exceptionally fine facilities which served both secondary and post-secondary age students. As the result of negotiations, programs in vocational education for moderately retarded students are now integrated into the existing programs. Food service skills are developed in the food service components. Laundry skills are a part of the cosmetology program and car cleaning is located in the auto repair section.
2. A secondary level program is attempting to integrate moderately retarded students into the regular school program to a greater extent. The efforts have been developed in the area of home economics. A small number of retarded students are now going into an advanced class in home economics. The home economics students

in these programs are given an orientation to handicapped students and some skills in working with them. Each handicapped student is assigned to one of the students in the home economics class who then has the responsibility of providing instruction in some basic skills in home economics under the supervision of the teacher.

Behaviorally Disordered

1. An elementary classroom for students with behavior problems is staffed with a teacher and an aide. The expressed purpose of this program is to enable the child with behavior problems to spend increasing amounts of time in the regular education program. In order to accomplish this, the teacher plans the instructional program for the students who are assigned to her class at a given time. While the aide implements these activities, the teacher may be in a regular education class which has another one of her students. While she is in the classroom, she obtains information on the functional level of the student and develops management systems for the teacher to better accommodate the student and which are consistent with those in use in the special education program.
2. Dissatisfaction with the accomplishments of a special class for students with behavior problems resulted in a program with an entirely different focus for one school district. When the teacher quit, the class was disbanded and the resources were used to develop a different model. A faculty member from a local university was contracted to provide services to the school district for two days per week. The task was twofold: (1) to train teachers to manage the behavior of students more effectively, and (2) to provide an environment with consistent contingencies for behavior by training the students.

Teachers having behaviorally disordered students in their classrooms are given training on a behaviorally based system which is designed to apply to all students in the classroom. At the same time, students in the classroom are given training in ignoring inappropriate behavior (regardless of its origin) and in reinforcing appropriate behavior. Initial results of these efforts are highly positive.

3. Problems of recruitment and retention of specialists in rural areas is well documented. A program model was developed to partially offset these problems. Behaviorally disordered students are programmed through a teacher of students with mild academic problems. These students are in addition to her caseload of students with learning problems. Two aides were sent to a regional residential program to learn the skills in behavior management used in that facility. This training lasted for seven weeks and was financed by the school. The resource teacher is responsible for designing the academic activities in the classroom, but the two aides (working with five students) manage the behavioral component. The program starts with considerable isolation of the student and they are gradually programmed into less restrictive settings as the behavior problems become more controlled.

Hearing Impaired

1. A rural school that has limited access to personnel with expertise in the area of hearing impairments due to isolation and distance has formed a local team to assist in the management of educational programs for six hearing impaired students. All of these students have hearing aids but, due to cultural pressures, dislike wearing

them. The team consists of regular education teachers, resource teacher, speech clinician, and school nurse. The school nurse provides expertise with regard to health problems while the speech clinician addresses problems in communication and obtains audiological information. The resource teacher assesses the educational problems and together they develop an educational plan. Depending on the plan, any or all may be involved in implementation.

2. One state has developed regional services to help rural communities deal with the problems of low incidence, especially visually impaired and hearing impaired students. Consultants in vision and hearing are employed on a regional basis and spend two days every two weeks in each rural county. During this time they assist in the identification of students by assisting the schools in the development of screening programs. They provide expertise in assessment and serve on the team developing the individualized educational plan. They provide training for personnel who are assigned specific tasks, e.g., screening procedures or aides to work with hearing impaired students. They monitor the student's progress and suggest changes in programming. Recommended educational materials and equipment are obtained by the local district.
3. Cooperative arrangements with six school districts has resulted in a rather comprehensive program for hearing impaired students. There is a large number of preschool students when compared to those of school age. There is a home-based program for students of ages 0 to 2. A center-based program is operated for 8 students between the ages of 2 to 5. Six of those are in a total communication program in the morning. The other two attend in the afternoon and

one taught manual communication. An itinerant teacher of the hearing impaired serves students in grades kindergarten through twelve.

Interagency Cooperation

1. Several schools in this project have developed systems of interagency cooperation in order to provide more efficient services to the handicapped and to prevent the development of overlapping services. These systems range from highly formal structures to very informal arrangements which, in small communities, can function rather effectively. Such systems include the public schools, the social service agency, the mental health agency, and other organizations which provide direct service. In addition, they may include local universities or colleges, parent organizations, other health organizations, vocational rehabilitation, or others.

Staff Development

1. One of the more common problems that small schools have with staff development programs is the diversity of the relatively small number of personnel employed. It is difficult to structure staff development activities that are consistently successful in addressing the needs of resource teachers, psychologists, speech clinicians, and whatever other categories of personnel that may be employed. A small rural school district allows the staff to use their professional days to obtain skill training on their own. Staff must identify their objectives, indicate the activities, and provide feedback to other district personnel. This time is most frequently used to visit other programs which have been identified by the staff

as having components which can provide the staff with different approaches to the education of handicapped students. The school funds their expenses.

2. Another school district has a similar program but is more extensive due to the fact that it is a larger, somewhat more affluent, district. A specific proportion of the staff development budget is allocated to upgrading teacher competencies. This allows teachers to attend specific workshops at district expense. Workshops must be consistent with a professional development plan. Other funds are devoted to training leadership personnel in the district who then use that training to develop skills in the direct service staff. Other funds are used for more general workshops and university courses. In effect, the school has a continuum of services for staff development.

Preschool Programs

1. Preschool programs were highly variable, often depending upon state policy and law. A few states mandate early childhood education for handicapped students from birth and one state forbids the expenditure of state or local funds for educational programs for children under five years of age. A number of districts attempt to serve young handicapped children to a greater extent than mandated by the state. At least one school district has attempted to provide for early intervention while recognizing that fiscal limitations prevent extensive services. On three days of the week, students from ages three to five or six are bussed into a center for one-half day of service. On the other two days, the staff provide consultation to parents of handicapped students in the home for those handicapped children who are from 0 to $2\frac{1}{2}$ or 3 years of age.

2. One district funds the preschool program without special education funds. Rather federal funds from another agency is used to employ a nurse with background in the education of young handicapped students. Four paraprofessionals are used to provide the direct service. Each paraprofessional will transport a child to the center in the school and work with them on an intensive one-to-one program. When returning the child to their home, they transport another to the center for service. This program operates for four days per week and on Fridays the staff provides services in the home of the students.

Administrative Organization

1. In order to provide services for handicapped students in fourteen school districts, a private, non-profit educational corporation was formed. The board of directors consists of board members and superintendents from each of the participating school districts. A membership fee based upon total student enrollment is charged to each of the member districts to cover administrative expenses and the cost of itinerant services. Tuition is assessed by the local districts for each student enrolled in a program operated by the agency which pays for the cost of specific programs. The purpose of the organization is to develop programs and then encourage the local districts to assume responsibility for them.
2. A very large rural agricultural area has been organized into an extensive cooperative. This organization includes 12 counties and 80 school districts. Services other than special education are also available through this cooperative (career guidance, purchasing, etc.). Thirty of the school districts participate

in the special education component. A program developer is assigned to each group of ten districts. These staff members provide consultation to the local school districts with regard to special education. Program leadership, inservice training, and other specialized services are available through the cooperative. For example, psychologists travel in a van which has been equipped to serve as their office. Testing materials are kept in the van and the assessments take place in this mobile unit.

Computers

1. There are a variety of computer applications in both instructional and management functions. A rather unique approach to computers is their use to generate psychological and speech clinician reports. Psychologists and speech clinicians went through a process of identifying common elements in all of the reports and the variety of options under each element. These were stored in the computer bank and were then used to generate the reports. Procedures were developed to insert clinical observations which were not included in the process. Results were greater consistency in the content of the psychological reports and a dramatic savings in time (a reduction from $2\frac{1}{2}$ hours to 12 minutes per report).

Cross-Age Tutoring

1. In a self-contained cross-categorical program, a cross-age tutoring program has been developed. As a pay-off for appropriate behaviors, students earn the opportunity to "teach" younger students. A student may find themselves as a tutor one day and as a tutee the next. Changes in achievement and behavior were noted by the teacher.

STATE LEVEL PROGRAMS

Programs serving handicapped children in rural areas are highly vulnerable to policy decisions generated from the state level. While the funding pattern of programs is the most obvious influence, it becomes apparent that many other decisions, both legislation and bureaucratic, also impact on rural programs. When the role of the state in the fourteen states in this project is analyzed, there is only one conclusion: There is fantastic diversity!

Funding

Funding can be based on a number of different variables. Six different methods are identified by Maher (1981). Most of the funding patterns in the states in this project are modifications or combinations of the models discussed by Maher. However, those models can be used to classify the funding systems in terms of their primary characteristics. Two (14%) of the states had unit funding which is described as a system in which a fixed amount of money is provided for each unit of service (e.g., classrooms) delivered to handicapped students. Four (29%) provided funding based upon personnel, mostly as a percentage of salaries for personnel employed in programs for the handicapped. One (7%) reimbursed on the basis of a fixed amount for each handicapped student, although the amount varied for the types of handicapping condition. Two (14%) had weighted formulas where schools were reimbursed on a per student basis with a proportional difference based on type of handicap and/or severity. Four (29%) had a system which provided for funding on a percentage of total costs with the percentages ranging from 14% to 100%. One state had a most unique system of funding. The total amount appropriated by the legislature was distributed to the

schools on a proportional basis, using school enrollment to determine the specific amount.

Mandated Age of Service

There was less diversity in the ages for which special education services were mandated. At the younger ages, one state mandated services at birth, one at age three, and one at age four. All other states mandated services at age five except one at age six. One state had legislation which forbid the expenditure of state or local funds for children under five years of age.

At the other extreme, one state mandates special education to age 25, three to age 21, three to age 20, two to age 19, three to age 18, and two to age 17.

Services

Technical Assistance. Many local districts look to the state agency as a source of technical assistance, particularly when problems occur. Indeed, it is frequently the only source for small rural schools. Special education administrators were asked about the availability of technical assistance from the state agency. In seven of those states, the responses were favorable in terms of availability, quality, and timeliness. In five states the responses were generally negative. Directors in these states generally viewed the state agency as a hinderance and a policing agency. In the other instances there were mixed reactions to the state agency.

Regional Efforts. One method of assisting rural schools in meeting the needs of handicapped students is the development of regional programs to provide assistance. In five of the states (36%), efforts to develop regional programs were apparent. In three states, the programs were well-developed, although the range of services that were available varied considerably.

Some of these projects addressed specific low incidence populations while others were more comprehensive. In two states, such programs were in the developmental stage.

Staff Development. Rural schools typically have few resources for staff development activities. Four of the states (29%) had systems of staff development which were capable of providing assistance to rural areas, although the vehicle for providing this assistance was quite different in all cases. In some states, financial support was the primary method, although none of the four states relied only on this method. Several states had arrangements whereby personnel (state department or others) were made available at state expense or at low cost to the district. One state had a system for arranging courses for local districts. In those four states where staff development was given a priority status, comprehensive systems were typically in place.

Preschool Programs. There was generally not much support from the state level for early childhood programs for handicapped students. Information obtained from local school personnel generally indicated that it was not a high priority in their state. Only two states were identified as having substantial technical assistance, financial support, and a firm legal basis for such programs.

Vocational Education. The area of vocational education was more difficult to assess than that of early childhood programs for several reasons. First, there were members of handicapped students being served in secondary vocational education programs without any special services being available or such services were provided as a part of the special education program without being specifically identified as such. Second, there were a number of districts where vocational education services were provided through another agency. There were only two states, however, where leadership from

the state and program support for vocational education programs for the handicapped could be identified. It appeared that extensive efforts were being exerted by local school districts without much support from state agencies.

Regulation of Caseload. In a number of states, the caseload of special education teachers appeared to be unreasonable. In one instance, a resource teacher was responsible for services to 57 children. Although she had five aides, programming responsibility for that many students appeared to be difficult at best. It was not unusual to find resource teachers with caseloads equal or greater than the class size of the regular classroom teachers. Only two of the states in this project had regulations in effect which governed the size of the caseload for special education teachers.

SUMMARY AND CONCLUSIONS

Summary

This project was designed to gather information regarding the status of selected aspects of special education programs in rural areas of the United States. Fourteen states in five different geographical areas of the country were selected and the state directors of special education were asked to nominate rural programs which had unique programs for providing services. A total of 33 school districts were visited representing four different administrative organizations: intermediate school districts, cooperatives, county systems, and single districts.

Agriculture was the primary source of income for most of the population in those districts, but with a large number having significant secondary sources. Schools populations ranged from 850 to 19,600. The percentage of handicapped students served ranged from 5.6% to 18.6%. The pattern of services to handicapped students being served paralleled national figures.

Problems relating to personnel were of major significance in rural areas. While most states had certification procedures which were designed to facilitate rural programming (generic certificates or regulations to permit cross-categorical services with categorical certificates), administrators reported some dissatisfaction with the certification requirements and/or the manner in which they were implemented by training programs. Generally, the concerns centered around the problem of having personnel trained to perform a variety of educational tasks to a diverse population of handicapped students. The other major concern was with the insensitivity of university training programs to rural needs. The lack of resources for systematic methods of staff development further complicated this problem.

Services to low-incidence handicapped populations were difficult for those rural systems to provide. Children with the more severe problems of hearing and vision typically were attending residential schools, often with little contact from the local school system. Identification of such students as well as the delivery of service appeared to be a problem. Yet, when confronted with the task of delivering services at the local level, some agencies were quite creative in the utilization of available resources. There was no clear relationship between the type of organization or the size of the agency and the type or scope of services available.

Programs for more severely retarded students were frequent in rural schools. However, many of those programs were functioning under major handicaps. Problems were identified in early intervention, age-appropriateness and least restrictive environment, curriculum and instruction, and leadership.

Most of the local agencies depended upon the resource teacher to provide services to students with behavioral disorders. Severe problems were often placed out-of-district. There was little consistency noted in the programs for such students.

Nearly one-half of the agencies had no early childhood programs. A number of districts had cooperative arrangements with other agencies. Preschool programs tended to be more available when cooperative arrangements existed.

Vocational education programs frequently capitalized on the availability of vocational programs for the non-handicapped with support services provided through special education. Only about one-third of the agencies had well defined programs of vocational education. Ten others had workstudy programs, modified classes in industrial education and home economics, or transported

students to facilities out-of-district. The frequency of programs was highest in the single district and decreased as the level of cooperation increased.

Administrative problems focused upon state departments, problems of distance, population density, transportation of students, personnel, and coordination of services. Some of those problems were exacerbated by the fact that most of the states (and the local districts) were having financial problems at the time the project was implemented.

When the function of the state was analyzed, the great diversity again emerged. Funding patterns were not at all consistent. Certification requirements varied even more. Early childhood programs and vocational programs were not of high priority. The most frequently cited positive characteristics of the state agencies were in the areas of technical assistance and staff development, yet in only one-half or fewer states involved in this survey were they of significance to the local directors.

Conclusions

Any generalization from the results of this study to rural areas generally is subject to some severe limitations. First, there was no attempt at selecting random programs. Rather, the programs were selected because personnel in the state agency perceived of them as outstanding in some respect. If anything, then, these results may represent the best in the rural areas.

Second, only selected aspects of programming were under consideration. These variables were selected because of the interest of the investigator. Typically, that interest had developed because of problems which had been observed in many different types of special education programs. Therefore, anything which may be interpretted as a negative finding may represent a

problem in special education generally rather than a problem specifically related to rural areas. The major difference may be that the solution is more difficult in rural areas and not as many options are available to rural administrators.

Third, while an attempt was made to be as objective as possible in the gathering of information for this project, much of it was subject to interpretation. Information from the personnel in the local agencies was certainly based upon their perception of the programs and problems in their local units. Equally obvious, the observations and the responses of local personnel were subject to interpretation by the investigator. Objectivity is certainly not a hallmark of this project, but it does represent the collective perceptions of a number of professionals about rural special education.

Within these limitations, some concluding observations may be made with an appropriate level of risk. It is in the hope that these observations will support other findings, provoke greater consideration and interest in rural special education, and possibly to suggest some solutions that they are offered.

Problems with personnel has frequently been cited as a major problem in rural areas. Certainly the results of this project would corroborate such previous findings, but also raise some further questions relating to personnel. The products of the training programs are not only difficult for rural areas to obtain, but when they do recruit successfully, they do not obtain candidates who meet their needs. Part of the problem appears to be in certification requirements, although the directors of special education frequently didn't view this as a problem of certification, but of the training programs. To this investigator, it appears as a problem of interaction. When the certifi-

cation is categorical or when certification requirements are minimal for a generic licensure (such as 23 or 25 quarter credits to teach any handicapped students at any age), training programs tend to produce a teacher with limited skills. Rural administrators then have concerns about the teacher's ability to function on a wide variety of situations as required in rural areas. These observations are consistent with those of Helge (1983, p. 19). These districts have limited resources for increasing the breadth of skills, and that problem is further complicated by the fact that there are not many personnel in rural areas performing similar functions. Further, only a few states have placed staff development in rural areas high on the list of priorities. Little wonder that these administrators responsible for special education programs frequently cite personnel problems as a major concern in any survey!

Staff development is a major problem for rural districts (Helge, 1981b). The lack of significant numbers of staff with similar training needs, lack of a firm financial base, low priority from state departments and administration, lack of familiarity with emerging models, and lack of coordination between components of the system all serve to complicate the process. When one considers that many of the special education staff will be teaching in rural communities for a number of years, the problem becomes more critical. Statewide or regional organizations are needed to organize and deliver staff development activities using existing technology. Some isolated efforts certainly indicate that this can become a reality.

Existing organizational structures do not offer a panacea for the delivery of services. Few differences were found in different administrative structures in the availability of services or in the manner in which these services were delivered. The major exceptions to this generalization were notable,

however. One state, through the intermediate organization, has developed comprehensive services in the rural areas. Another state, through regional programs, has demonstrated the capability of providing services to low incidence handicapped populations, but the conceptulization of these programs represents a significant departure from the traditional urban model. An assumption underlying the approach is that many services can be provided by staff such as regular teachers and aides who do not have special qualifications (i.e., certification) to assist in the education of handicapped students. These programs provide for screening and identification, monitoring of pupil progress, consultation, and training when needed by those who have the responsibility of providing the service. Regional approaches combined with differentiated staffing patterns appear to be a viable alternative to more traditional approaches.

This use of differentiated staffing was also noted in other administrative organizations as well. Some of the smallest units in this survey were using a combination of consultants, regular teachers, resource teachers, and aides to provide services to students with relatively severe and/or infrequent handicapping conditions. From some perspectives, these efforts could be judged as more desirable than the more traditional approaches. The presence of such arrangements would suggest that, while a regional, complex organizational structure might facilitate such efforts, they can be implemented in even small units under favorable conditions.

In terms of availability of service options and the scope of programs, the intermediate unit surfaces as an effective method for providing services. In those organizations, two major problem areas were identified. One was the highly restrictive environment for the trainable mentally retarded students and the lack of programming in the vocational area. This could possibly be

due to the lack of access to existing programs. The management of programs designed to integrate the students into existing programs for the non-handicapped is probably facilitated when both components are in the same administrative structure.

As one might predict, the number of students being served who had impairments of hearing or vision were below the predicted levels. However, the proportion of students being served in those rural areas is not much different from the national figures (Education of the Handicapped, June 29, 1983). It does appear that the options available in rural areas are much more limited. For severe problems, placement is frequently in a remote program, typically a residential school. Some rural programs would provide evidence that other alternatives such as the regional programs and differentiated staffing mentioned earlier might be as cost-effective as the more traditional programs and provide other benefits for the student as well, particularly the opportunity to remain in his own home and community.

There are significant numbers of programs in rural areas for mentally retarded students whose problems are too severe to be met in the typical resource program. Probably the most apparent deficiency in these programs is the discrepancy between present practice and current knowledge. Specifically, the absence of highly individualized programs derived from curriculum-based assessments is the most obvious deficiency. It is the investigators opinion that this results from a combination of factors--training programs without appropriate expertise in the area, minimal certification requirements, and lack of programmatic leadership at either the local or state level. It would appear that the problems in serving this population are not likely to be resolved until the leadership function can be remedied. The problems in these programs apparently are not so much related to the availability of programs as they are to the quality.

Programs for behaviorally disordered students appear to be in the emergent stage. Yet, one detects some reluctance to develop services for these students, for reasons which are not always apparent. One such factor appears to be the lack of knowledge of appropriate models to serve these students which do not require a highly restrictive placement. In agencies which had implemented models designed to support the students and the teachers in regular school programs, acceptance of programming for these students was more obvious. As with the programs with the more severely retarded, a major problem emerges in the area of leadership and the dissemination of knowledge.

A comment needs to be directed toward the proportion of identified behaviorally disordered students. Obviously, very few are identified in most rural schools. This could be interpretted as a problem of identification or a problem of reporting the students in the appropriate category. An alternative explanation may be that the number of students presenting behavior problems that need special services is indeed less in rural areas. When one observes the cohesiveness of rural communities, the sense of community responsibility that exists, and the tendency of parents to resolve the problems of their children without seeking a public agency, the alternative explanation begins to appear reasonable. Considered in the context of community pressures, it even becomes plausible.

Preschool programs are highly variable, both in the frequency of programming and in the types of programs. Policy makers at the state level seem to exhibit very little enthusiasm for such programs (observe the ages in their laws), even though the professionals in the field are supportive. Lack of consistency seems to be the result as the schools use any methods which are available to provide the service. Most frequently, this involves programming with another agency.

Secondary programs occur less frequently than elementary and are often designed similar to those in elementary. Observations, as well as comments from a number of administrators, indicate the need for expansion as well as a redesign of secondary programs. Vocational education programs represent one alternative which is used in a number of schools in this project. Interestingly, more of the single district schools offer some type of program than any of the other administrative structures. Yet, nearly one-third of the agencies had no provisions for providing vocational education to handicapped students and another 20% had programs which were marginal in terms of the level of service available.

At the beginning of this discussion, comments were directed toward the questionable validity of this project. One assuring phenomena does help. The problems which were observed by this investigator parallel, in most instances, the problems identified by the directors of special education. They are also generally consistent with findings of previous studies.

While it is obvious that there are numerous problems in providing special education services in rural areas, they are certainly not insurmountable. As one considers the ingenuity of the special education personnel in this survey of thirty-three rural programs, it seems apparent that many solutions are at hand. As several authors have suggested, the major need is for those leaders who determine national and state policy to include consideration for the rural population (Cole and Ranken, 1981; Helge, 1983; Heller, 1971; Sher, 1978).

NOTES

The investigator cannot conclude this report without a few observations and thoughts that occurred during 33,000 miles of travel across this diverse country. These comments relate, not only to issues in special education, but the impressions after nine months of travel.

1. One often reads about the suspicious nature of the rural population. This observation was not supported in these travels. Cautious, maybe. Suspicious, no! Most often it seemed that they waited for the stranger to initiate the contact. Once this occurred, the rural population proved to be gracious, stimulating, and inquisitive. Their generosity was unmatched. The number of times that services and gifts were offered was not recorded, but they occurred frequently. In all of the travels, one never felt far from assistance if it were needed.
2. When travelling for that period of time and over that distance, one expects to encounter a variety of problems. There were three incidences involving theft and/or vandalism. All occurred in large cities while enroute to rural communities. There were two instances with automobile problems, both in rural communities. Both instances were complicated by lack of parts and/or by previously scheduled work. Not only was the car repaired in such a manner as to reduce the loss of time to a minimum, it also entailed working beyond the typical work day. And no premiums were requested!
3. We are lucky there are only twenty-six letters in the alphabet. After being in 14 states, the letters became most confusing.

After a while, it became difficult to remember the differences between the SXI's and the E/BD's. All is well though, because we also have the "Willie M's." (One creative director also had the MTH--"Meaner Than Hell.")

4. When the project was in the embryonic stage, a major assumption was that one would find a high degree of relationship between the level of funding from the state and the availability of quality programs. Assuming that the investigator is capable of making more global judgment as to the quality of programs, such an assumption does not appear to be supported. After completing the 33 site visits, the major variable related to quality of programs which surfaced was leadership at the state level. The quality and availability of technical assistance, coupled with aggressive personnel, seemed to be the most frequent characteristic of states with consistently well developed local programs.
5. The preceding comments can be expanded even further. Those quality programs most frequently occurred in states with strong formal ties between the major components of the system--state departments, local agencies, and the training institutions. Almost without exception, the leadership for such united efforts came from the state agency.
6. If one is looking for professional renewal, I can make a suggestion!

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